

Jayawickreme, J., Forgeard, M.J.C., & Blackie, L.E.R. (2015)

**Personality Science, Resilience, and Posttraumatic Growth,**

*Behavioral and Brain Sciences*, 38, 333-339.

NB: Commentary on a Target Article: Raffael Kalisch, Marianne B. Müller, and Oliver

Tüscher (2015) A conceptual framework for the neurobiological study of resilience,

*Behavioral and Brain Sciences*, 38, 1-79.

Institution: Wake Forest University (Jayawickreme); University of Pennsylvania & McLean Hospital / Harvard Medical School (Forgeard); Wake Forest University (Blackie)

Department of Psychology, Wake Forest University, P.O. Box 7778 Reynolda Station, Winston-Salem, NC 27109, USA (Jayawickreme & Blackie); Department of Psychology, University of Pennsylvania, 3720 Walnut Street, Solomon Lab Bldg., Philadelphia, PA 19104-6241, USA (Forgeard)

[jayawide@wfu.edu](mailto:jayawide@wfu.edu) (Jayawickreme); [mariefd@psych.upenn.edu](mailto:mariefd@psych.upenn.edu) (Forgeard); [blackie@wfu.edu](mailto:blackie@wfu.edu) (Blackie)

<http://www.wfu.edu/~jayawide> (Jayawickreme);  
<https://sites.google.com/site/marieforgeard/home> (Forgeard);  
<http://www.growthinitiative.org> (Blackie)

Accepted for Publication in *Behavioral and Brain Sciences*. Published by Cambridge University Press. This article may not exactly replicate the final version published in the Cambridge University Press journal. A link to the published article:

<http://dx.doi.org/10.1017/S0140525X1400082X>

## Abstract

PASTOR represents an innovative development in the study of resilience. This commentary highlights how PASTOR can both help clarify critical questions in and benefit from engaging with new research in personality science on behavioral flexibility across situations in addition to stability over time, as well as the relationship between resilience and posttraumatic growth.

## Main Text

The Positive Appraisal Style Theory of Resilience (PASTOR) outlined by Kalisch et al. (2014) represents an innovative development in the study of resilience, and captures another step in the paradigm shift from investigating disease to health (Jayawickreme, Forgeard, & Seligman, 2012). The goal of this commentary is to highlight how PASTOR can both help clarify critical questions in and benefit from engaging with new research in personality science in developing a coherent theory of resilience.

Recent advances in personality psychology have provided new perspectives on behavioral flexibility—and consistency—across situations (Fleeson & Jayawickreme, 2014). Such flexibility can serve as a tool for promoting resilience as defined by PASTOR. Despite the widespread belief that personality is stable, a large literature has revealed that on average, most people display moderate, mostly positive, amounts of trait change across the lifespan (Roberts, Walton, & Viechtbauer, 2006). Thus, individuals may be able to influence the degree to which their personality varies and changes (Edmonds, Jackson, Fayard, & Roberts, 2008). In addition, studies using experience sampling methods have demonstrated a surprisingly high level of variability in trait-

relevant behavior in everyday life, with most individuals acting in ways that run the entire continuum of each trait dimension (Fleeson, 2001). Furthermore, individuals have the ability to convincingly change their trait-relevant behavior (or personality “state”) in the moment when instructed to do so (McNeil & Fleeson, 2006; Fleeson, Malanos, & Achille, 2002). Of note, people can change their levels of happiness by “enacting” personality states associated with happiness, such as extraversion (Fleeson et al, 2002; McNiel, Lowman & Fleeson, 2010; Zelenski, Santoro & Whelan, 2011). It should be noted that personality states have the same content as a trait but for shorter duration, and that states and traits are isomorphic in some regards. Part of having a trait is simply acting that way somewhat more often, and acting a certain way is similar to being that way (Jayawickreme, Meindl, Helzer, Furr & Fleeson, 2014).

Thus, personality traits are stable in the sense that there is reliable between-person variation in aggregate over time, and flexible in the sense that there is also substantial within-person variation in an individual’s trait-relevant behavior (or personality states) depending on situational and internal cues (Fleeson, 2001, 2004). Understanding which specific personality traits (or “resilience-conducive” traits, as Kalisch et al. term them) might promote a flexible and positive reappraisal style as posited by PASTOR, and then harnessing behavioral variability to promote interventions aimed at developing and flexibly applying this style (Blackie, Roepke, Forgeard, Jayawickreme, & Fleeson, 2014; Fleeson & Jayawickreme, 2014) in a manner that ultimately leads to lasting changes in the cognitive machinery or mental skills that promotes a positive reappraisal style represents an exciting area for new research (see also Blackie, Jayawickreme, Forgeard, & Jayawickreme, 2014).

Relatedly, PASTOR has implications for helping researchers understand empirical overlap between resilience and closely related constructs. To illustrate this point, we propose that PASTOR may help clarify the relationship between resilience and posttraumatic growth —positive psychological change experienced as a result of the struggle with highly challenging life circumstances (Jayawickreme & Blackie, 2014). While resilience is generally defined as the absence of negative outcomes during or following potentially harmful circumstances (e.g. Seery, Holman & Silver, 2010), posttraumatic growth corresponds to increases in positive outcomes after adversity (We note that Kalish et al.’s definition of resilience conflates these two distinctions, as they define resilience as “any trajectory that eventually leads to levels of functioning that are comparable *or even better* than at the outset”). Posttraumatic growth is purported to occur in five distinct life domains - individuals report experiencing a greater appreciation of life, more intimate social relationships, heightened feelings of personal strength, greater engagement with spiritual questions, and the recognition of new possibilities for their lives (Tedeschi & Calhoun, 2004). Posttraumatic growth is generally viewed as both a set of processes (e.g., coming to terms with adversity, identifying and experiencing cognitive, behavioral, and affective changes) and a set of outcomes (e.g., great satisfaction with life, wisdom).

In spite of the theoretical differences between resilience and posttraumatic growth, empirical evidence has shown that people high in traits such as cognitive complexity, self-efficacy, and dispositional hope are more likely to report growth (Tennen & Affleck, 1998; Tedeschi & Calhoun, 1995). In other words, people who report growth may in fact be those who were more resilient to begin with. As a result, much

debate remains concerning the exact nature of posttraumatic growth -- an issue that the PASTOR framework may help clarify. To date, most of the scholarship in this area has focused on documenting self-reported retrospective changes (i.e., perceptions of past changes). Ongoing and future research in this area is seeking to determine whether or not retrospective self-perceptions of change also correspond to changes in behavior and cognition measured longitudinally (Jayawickreme & Blackie, 2014; Roepke, Forgeard, & Elstein, 2014; Schueller, Jayawickreme, Blackie, Forgeard, & Roepke, 2015). This research can tease out the degree to which resilience precedes growth, and the extent to which both resilience and growth are brought about by, or associated with, the flexible and positive reappraisal style as proposed by PASTOR. Thus, PASTOR has critical implications for meaningfully distinguishing between the two constructs and pushing further the study of psychological functioning under conditions of adversity.

In addition, and related to this, PASTOR can help researchers design thoughtful experiments and/or interventions aimed at promoting growth following adversity. More specifically, future research may examine the usefulness of fostering selected personality states (as described above). For example, a review of past research suggested that openness to experience, extraversion, and agreeableness (candidate “resilience-conducive” traits) predict adaptive outcomes following adversity (Linley & Joseph, 2004). Future research could assess whether experimental interventions promoting open, extraverted, and/or agreeable behaviors may lead to positive and flexible cognitive styles described by PASTOR, and in turn, resilience or growth.

## References

Blackie, L.E.R., Jayawickreme, E., Forgeard, M.J.C., & Jayawickreme, N. (2014). The Protective Function of Personal Growth Initiative among a Genocide-Affected Population in Rwanda. *Psychological Trauma: Theory, Research, Practice, and Policy*, in press.

Blackie, L. E .R., Roepke, A .M., Forgeard, M. J. C., Jayawickreme, E. & Fleeson, W. (2014). Act well to be well: The promise of changing personality states to promote well-being. In A. C. Parks (Ed.), *Handbook of positive psychological interventions*. Oxford: Wiley-Blackwell.

Edmonds, G. W., Jackson, J. J., Fayard, J. V., & Roberts, B. W. (2008). Is character fate, or is there hope to change my personality yet? *Social and Personality Psychology Compass*, 2(1), 399–413. doi:10.1111/j.1751-9004.2007.00037.x

Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology*, 80(6), 1011–1027. doi:10.1037/0022-3514.80.6.1011

Fleeson, W. (2004). Moving personality beyond the person-situation debate: The challenge and the opportunity of within-person variability. *Current Directions in Psychological Science*, 13(2), 83–87. doi:10.1111/j.0963-7214.2004.00280.x

Fleeson, W., & Jayawickreme, E. (2014). Whole Trait Theory, *Journal of Research in Personality*. doi: <http://dx.doi.org/10.1016/j.jrp.2014.10.009>

Fleeson, W., Malanos, A. B., & Achille, N. M. (2002). An intraindividual process approach to the relationship between extraversion and positive affect: Is acting extraverted as “good” as being extraverted? *Journal of Personality and Social Psychology*, 83(6), 1409–1422. doi:10.1037/0022-3514.83.6.1409

McNiel, J. M. & Fleeson, W. (2006) The causal effects of extraversion on positive affect and neuroticism on negative affect: Manipulating state extraversion and state neuroticism in an experimental approach. *Journal of Research in Personality*, 40, 529–50.

McNiel, J. M., Lowman, J. C., & Fleeson, W. (2010). The effect of state extraversion on four types of affect. *European Journal of Personality*, 24(1), 18–35. doi:10.1002/per.738

Jayawickreme, E. & Blackie, L.E.R. (2014). Post-traumatic growth as positive personality change: Evidence, controversies and future directions. *European Journal of Personality*, 28, 312-331.

Jayawickreme, E., Forgeard, M. J. C., & Seligman, M. E. P. (2012). The engine of well-being. *Review of General Psychology*, 16(4), 327–342. doi:10.1037/a0027990

Jayawickreme, E. Meindl, P., Helzer, E.G., Furr, R.M., & Fleeson, W. (2014). Virtuous States and Virtuous Traits: How the Empirical Evidence Regarding the Existence of Broad Traits Saves Virtue Ethics from the Situationist Challenge. *Theory and Research in Education*, 12 (3), 283-308.

Linley, P. A., & Joseph, S. (2004). Positive Change Following Trauma and Adversity: A Review. *Journal of Traumatic Stress, 17*(1), 11–21.  
doi:10.1023/B:JOTS.0000014671.27856.7e

Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006a). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin, 132*(1), 1–25. doi:10.1037/0033-2909.132.1.1

Roepke, A. M., Forgeard, M. J., & Elstein, J. G. (2014). Providing Context for Behaviour: Cognitive Change Matters for Post-Traumatic Growth. *European Journal of Personality, 28*, 347-348.

Schueller, S.M., Jayawickreme, E., Blackie, L.E.R., Forgeard, M.J.C., & Roepke, A.M. (2015) Finding character strengths through loss: An extension of Peterson and Seligman (2003), *Journal of Positive Psychology, 10*, 53-63, DOI: 10.1080/17439760.2014.920405

Seery, M. D., Holman, E. A., & Silver, R. C. (2010). Whatever does not kill us: Cumulative lifetime adversity, vulnerability, and resilience. *Journal of Personality and Social Psychology, 99*(6), 1025–1041. doi:10.1037/a0021344

Tennen, H., & Affleck, G. (1998). Personality and transformation in the face of adversity. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive changes in the aftermath of crisis*. (pp. 65–98). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.

Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma & transformation: Growing in the aftermath of suffering*. Thousand Oaks, CA US: Sage Publications, Inc.

Tedeschi, R. G., & Calhoun, L. G. (2004). Target Article: “Posttraumatic Growth: Conceptual Foundations and Empirical Evidence.” *Psychological Inquiry, 15*(1), 1–18.  
doi:10.1207/s15327965pli1501\_01

Zelenski, J. M., Santoro, M. S., & Whelan, D. C. (2012). Would introverts be better off if they acted more like extraverts? Exploring emotional and cognitive consequences of counter-dispositional behavior. *Emotion, 12*(2), 290-303